



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street  
San Francisco, CA 94105-3901

OCT 16 2009

Christy Smith  
Refuge Manager  
San Pablo Bay National Wildlife Refuge  
7715 Lakeville Highway  
Petaluma, CA 94954

Subject: Draft Environmental Impact Statement (DEIS) for the Sears Point Wetlands and Watershed Restoration Project, Sonoma County, California (CEQ # 20090296)

Dear Ms. Smith:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. Thank you for agreeing to accept EPA's comments 3 days past the comment deadline. Our detailed comments are enclosed.

The proposed project would restore tidal wetlands and rehabilitate diked wetlands and upland habitats for a wide range of species, and include various other habitat enhancements and opportunities for recreation, education, and improved range management. While we support the goals of the project, the DEIS does not include specific information on whether these proposed actions will result in direct or indirect impacts to waters of the U.S. that would be subject to Section 404 of the Clean Water Act. The DEIS should also include contingency measures for potential damage, during a catastrophic event, to the proposed core levee partially constructed with contaminated sediments, and additional information on the adaptive management strategy for methyl mercury. Finally, EPA recommends addressing the forthcoming San Francisco Bay Area non-attainment status for the 2006 24-hour National Ambient Air Quality Standard (NAAQS) for fine particulate matter (PM<sub>2.5</sub>), and incorporating measures to reduce combustion pollutants from diesel engines. We have rated the DEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "Summary of Rating Definitions").

We appreciate the opportunity to review this DEIS. When the Final Environmental Impact Statement (FEIS) is released for public review, please send a hard copy (and if available, a disc copy) to the address above (mail code: CED-2). If you have any questions, please contact

me at (415) 972-3521, or contact Susan Sturges, the lead reviewer for this project. Susan can be reached at (415) 947-4188 or [sturges.susan@epa.gov](mailto:sturges.susan@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Kathleen M. Goforth". The signature is fluid and cursive, with a long horizontal stroke at the end.

Kathleen M. Goforth, Manager  
Environmental Review Office  
Communities and Ecosystems Division

Enclosure: Summary of EPA Rating Definitions  
EPA's Detailed Comments

cc: Rob Lawrence, U.S. Army Corps of Engineers, San Francisco District

## SUMMARY OF EPA RATING DEFINITIONS\*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

### ENVIRONMENTAL IMPACT OF THE ACTION

#### *"LO" (Lack of Objections)*

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

#### *"EC" (Environmental Concerns)*

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

#### *"EO" (Environmental Objections)*

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

#### *"EU" (Environmentally Unsatisfactory)*

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

### ADEQUACY OF THE IMPACT STATEMENT

#### *"Category 1" (Adequate)*

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

#### *"Category 2" (Insufficient Information)*

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

#### *"Category 3" (Inadequate)*

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

## **Section 404 Clean Water Act**

The Draft Environmental Impact Statement (DEIS) identifies existing wetland communities at the project site (p. 3.5-3 – 3.5-8), but does not discuss Section 404 Clean Water Act jurisdictional features nor the regulatory process for construction. The tidal wetland restoration effort from the Proposed Project will involve the loss of 94 acres of farmed seasonal wetlands, and the Full Tidal Alternative would include the additional loss of 30 acres of vernal pools and 41 acres of seasonally saturated annual grasslands (p. 3.5-19). The DEIS also describes a number of proposed actions not specific to tidal restoration nor flood protection, such as the construction of access roads, bay trail segments, and utility relocation, but does not include specific information on whether these activities will result in direct or indirect impacts to waters of the U.S.

### *Recommendations:*

- The Final Environmental Impact Statement (FEIS) should address what regulatory processes will occur in relation to the dredge/fill of the existing jurisdictional wetlands and other jurisdictional waters of the U.S., for the tidal restoration effort and associated levee breaching and construction.
- The FEIS should identify any construction activities associated with the proposed access road, bay trail segments, and utility relocation that will occur in waters of the U.S. Include measures that will be taken to avoid and minimize any short- and long-term adverse impacts to water quality, aquatic resources, and other resources. Propose mitigation to compensate for unavoidable impacts. Commit to these measures and mitigation in the Record of Decision (ROD).

## **Contaminated Sediments**

The DEIS identifies localized soil contamination derived from lead shot and clay targets, primarily lead and polynuclear aromatic hydrocarbons (PAHs), on a portion of the property leased by the Black Point Sports Club on the Dickson Ranch parcel (p. 3.3-8). The DEIS indicates that a Corrective Action Plan (approved by San Francisco Bay Regional Water Quality Control Board in November 2008) proposes to excavate lead-contaminated soil from the Black Point Sports Club as a site remediation measure and use it as fill material (encapsulated) for a portion of the new flood control levee (p. 3.9-5). According to the DEIS, implementation of the Corrective Action Plan would ensure that all contaminated soils from the Sports Club site are appropriately excavated and sequestered during levee construction. If contaminants from levee fill were to disperse into the water column, impacts on water quality would be potentially significant (p. 3.3-23).

The DEIS includes several administrative controls to control access to the contaminated soils used to construct the levee core. This includes the development of a long-term soil

management plan addressing access to the soil associated with levee maintenance or construction activities, which would include periodic inspections of the levee and provide guidance on handling the affected soil, should access or relocation be necessary (p.3.9-15). However, the core levee is proposed on unconsolidated Bay mud deposits, which could subject the levee to strong seismic ground shaking and ground failure related to liquefaction during a major earthquake. This could result in damage to any or all of the levee's structural components, including the core levee (p. 3.1-14). EPA recommends including administrative controls to ensure that measures are in place to address exposure of the contaminated soils during unforeseen damage to the core levee.

*Recommendation:* Ensure that the long-term soil management plan and/or other appropriate administrative control includes contingency measures for damage caused to the core levee following natural disaster or other unforeseen event that exposes contaminated soils to the water column.

### **Methyl Mercury Adaptive Management Strategy**

The DEIS states that an adaptive management plan will be developed and implemented to address methyl mercury production and accumulation in the restoration site. The goal of the plan is to ensure that tidal restoration at the Sears Point site does not substantially increase the risk of bioaccumulation for fish and wildlife species and does not substantially increase the risks related to human consumption of fish from San Pablo Bay or Tolay Creek. Further, the plan would be developed in consultation with the responsible regulatory agencies implementing and permitting other wetland restoration projects in the Bay, including the Hamilton Wetland Restoration Project and the South Bay Salt Pond Restoration Project (p. 3.3-15 – 3.3-16). The DEIS identifies general goals for water- and sediment-quality, hydrodynamics, and benthic invertebrate monitoring and possible corrective actions. The FEIS should include additional information on the adaptive management strategy in order to enable the reader to fully understand how possible adverse effects of methyl mercury will be minimized.

*Recommendation:* The FEIS should provide specific information regarding the adaptive management strategy. At a minimum, the FEIS should identify the key elements of the plan including: monitoring objectives and timelines; information needs; needed financial, technical, and human resources; identities of responsible parties; the process for evaluating monitoring results, including indicators and criteria; the process for altering management decisions; the data management process; and the process for communicating results.

### **Final 24-hour PM<sub>2.5</sub> NAAQS Designation for San Francisco Bay Area**

The project site is located in an area that will be designated as non-attainment for the 24-hour National Ambient Air Quality Standard (NAAQS) for fine particulate matter (PM<sub>2.5</sub>). On October 8, 2009, the EPA Administrator signed a notice outlining area designations, including the San Francisco Bay Area with Sonoma County partially designated, as non-attainment for the 2006 24-hour PM<sub>2.5</sub> NAAQS. The designation will be effective 30 days after publication in the Federal Register, which is expected to occur within the next several weeks. EPA recommends addressing the new 24-hour PM<sub>2.5</sub> NAAQS San Francisco Bay Area designation in the FEIS and

incorporating reasonable measures and mitigation approaches to address project PM<sub>2.5</sub> emissions. Considering the long term nature of the project, EPA recommends reviewing the new state implementation plan (SIP) that will be prepared to determine how it applies to the project. For the latest information on the 24-hour PM<sub>2.5</sub> NAAQS area designations and timelines for implementing the standard, please visit EPA's website at <http://www.epa.gov/pmdesignations/2006standards/regs.htm#4>.

#### *Construction Mitigation Measures*

In order to reduce construction and operation-related air quality impacts, EPA recommends the project proponent consider and discuss in the FEIS opportunities for reducing impacts to air quality by reducing the use of diesel-powered equipment, requiring contractors to keep the equipment fine-tuned, or using alternatively fueled vehicles. EPA is aware of the serious health effects that diesel particulate and other fine particulates can cause and urges project proponents to reduce particulate emissions to the greatest extent possible.

#### *Recommendations:*

EPA recommends that mitigation to reduce combustion pollutants from diesel engines be identified and adopted in the FEIS and ROD. EPA provides the following recommendations to incorporate into the FEIS, where feasible and applicable:

#### *Mobile and Stationary Source Controls:*

- Reduce use, trips, and unnecessary idling from heavy equipment.
- Maintain and tune engines per manufacturer's specifications to perform at California Air Resources Board (CARB) and/or EPA certification levels, where applicable, and to perform at verified standards applicable to retrofit technologies. Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications. CARB has a number of mobile source anti-idling requirements. See their website at: <http://www.arb.ca.gov/msprog/truck-idling/truck-idling.htm>.
- Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations.
- If practicable, lease new equipment meeting the most stringent of applicable Federal or State Standards. In general, only Tier 2 or newer engines should be employed in the construction phase.
- Utilize CARB and/or EPA-verified particulate traps and other appropriate controls where suitable to reduce emissions of diesel particulate matter and other pollutants at the construction site.

#### *Administrative controls:*

- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking. (Suitability of control devices is based on: whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public.) Meet CARB diesel fuel requirement for off-road and on-highway (i.e.,

15 ppm), and, where appropriate, use alternative fuel sources such as natural gas and electric power.

- Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow.
- Identify sensitive receptors in the project area, such as children, elderly, and infirm, and specify the means by which you will minimize impacts to these populations. For example, locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners.